

## New Distribution Records for the Mosquitoes of the Southeastern United States in 1943

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The continuation of the United States Army's mosquito survey program, now in its second season, continues to add materially to our knowledge of the abundance and distribution of the mosquito fauna of the seven states in the Southeastern United States which comprise the Fourth Service Command. A considerable number of new state records as well as new locality records have been added this year, and in addition one new species of *Aedes* has been collected in Florida and will be described at a later date.

Since the state of Louisiana is no longer under the jurisdiction of this Command, the Fourth Service Command is now composed of the following states: Florida, Georgia, Alabama, Mississippi, Tennessee, North Carolina, and South Carolina.

Several Army installations scattered throughout the above mentioned states submit weekly collections of mosquito adults and larvae to this laboratory for identification or confirmation. The fundamental purpose underlying these col-

lections is to keep a constant check on the abundance of *Anopheles quadrimaculatus* at the various Army posts.

Approximately 142 stations submitted mosquitoes for identification, and from January through October the number of specimens identified at this laboratory totaled 540,748 adults and 151,891 larvae. All of the following records are based upon these identifications. A check list of the mosquitoes from this area is given in table 1, which is modified from King *et al.* (1942). Our accumulated records to date are included in this table.

Many of the following collections were too numerous to list individually so they are lumped into weekly or even monthly periods wherever this was thought to be advantageous. The collections are listed under the respective species according to type and are indicated by the following symbols: (T)=light trap (New Jersey type); (S)=resting station such as culvert, nail keg, barn, etc.; (B)=biting; (R)=specimens reared from larvae; (L)=larvae. These types of collections should be self-explanatory, but it may be well to mention that, as used by us, biting records do not necessarily mean that the specimen was caught in the act of blood-sucking. This should be noted since a few males are reported in biting collections.

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<sup>3</sup> It is desired to express appreciation to the following officers for assistance and encouragement: Colonel Sanford W. French, M.C., Colonel Charles G. Souder, Colonel Dwight M. Kuhns, M.C., and Colonel M. J. Blew, Sn.C., and also to Lieutenants James Toffaletti, Louis Roth, Harry Hoogstraal; Corporal John Wanamaker; Corporal R. Chamberlain; Miss Leonora Peeples, SP-3; and Miss Jeanne Pryor, SP-3.

Table 1.—Genera and species of mosquitoes occurring in seven southeastern states comprising the fourth service command.

GENUS AND SPECIES	RECORDED IN <sup>1</sup>						
	Fla.	Ga.	Ala.	Miss.	Tenn.	N. C.	S. C.
<i>Aedes</i>							
<i>aegypti</i>	x	x	x	x	x	x	x
<i>atlanticus</i>	x	x	x	42	P	x	x
<i>atropalpus</i>	—	—	—	—	x	x	—
<i>canadensis</i>	x	42	42	x	x	x	x
<i>cinereus</i>	—	42	—	—	43	43	42
<i>dupreei</i>	x	42	x	42	43	x	x
<i>fulvus pallens</i>	x	x	42*	x	P	x	x
<i>grossbecki</i>	—	—	—	x	—	—	—
<i>infirmatus</i>	x	x	43	x	P	x	x
<i>mitchellae</i>	x	x	x	42	—	x	42
<i>sollicitans</i>	x	x	x	x	—	x	x
<i>sticticus</i>	x	x	42	42	x	x	42
<i>stimulans</i>	—	—	—	x	—	—	—
<i>taeniorhynchus</i>	x	x	x	x	—	x	x

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GENUS AND SPECIES	RECORDED IN						
	Fla.	Ga.	Ala.	Miss.	Tenn.	N. C.	S. C.
<i>thibaulti</i>	43	x	x	x	P	x	43
<i>lormentor</i>	x	x	x	x	—	43	x
<i>triseriatus</i>	x	x	x	x	x	x	x
<i>trivittatus</i>	—	x	—	—	42	42	—
<i>texans</i>	x	x	x	x	x	x	x
<i>Anopheles</i>							
<i>albimanus</i>	x	—	—	—	—	—	—
<i>atropos</i>	x	43	x	x	—	42	x
<i>barberi</i>	x	x	x	x	x	x	x
<i>crucians bradleyi</i>	x	42	x	x	—	43	x
<i>crucians crucians</i>	x	x	x	x	x	x	x
<i>crucians georgianus</i>	42	x	42	42	—	42	42
<i>pseudopunctipennis</i>	—	—	—	x	x	—	—
<i>punctipennis</i>	x	x	x	x	x	x	x
<i>quadrimalatus</i>	x	x	x	x	x	x	x
<i>walkerii</i>	x	x	P	42	x	43	P
<i>Culex</i>							
<i>apicalis</i>	x	x	x	42	x	x	x
<i>atratus</i>	42	—	—	—	—	—	—
<i>bahamensis</i>	x	—	—	—	—	—	—
<i>erraticus</i>	x	x	x	x	x	x	x
<i>nigripalpus</i>	x	x	x	43	43	—	x
<i>peccator</i>	x	x	x	x	x	x	x
<i>pilosus</i>	x	x	x	42	—	x	x
<i>pipiens</i>	—	42	42	—	x	x	42
<i>quinqüefasciatus</i>	x	x	x	x	x	x	x
<i>restuans</i>	x	x	x	x	x	x	x
<i>salinarius</i>	x	x	x	42	42	x	x
<i>tarsalis</i>	43	43	43	43	42	—	43
<i>Culiseta</i>							
<i>inornata</i>	x	42	x	x	42	x	x
<i>melanura</i>	x	x	x	42	43	x	x
<i>Deinocerites</i>							
<i>cancer</i>	x	—	—	—	—	—	—
<i>Mansonia</i>							
<i>perturbans</i>	x	x	x	42	x	x	x
<i>titillans</i>	x	—	43	—	—	—	—
<i>Megarhinus</i>							
<i>rutilus</i>	x	x	—	—	—	—	—
<i>septentrionalis</i>	—	x	x	x	x	x	x
<i>Orthopodomyia</i>							
<i>alba</i>	—	—	x	43	—	—	43
<i>signifera</i>	x	x	x	x	x	x	x
<i>Psorophora</i>							
<i>ciliata</i>	x	x	x	x	x	x	x
<i>confinnis</i>	x	x	x	x	x	x	x
<i>cyanescens</i>	—	42	x	x	43	—	43
<i>discolor</i>	x	x	x	x	x	x	42
<i>ferox</i>	x	x	x	x	x	x	x
<i>horrida</i>	—	42	42	x	x	42	43
<i>howardii</i>	x	x	43	x	x	x	x
<i>pygmaea</i>	x	—	—	—	—	—	—
<i>varipes</i>	x	x	x	x	x	42	43
<i>Uranotaenia</i>							
<i>lowii</i>	x	42	42	42	—	43	x
<i>sapphirina</i>	x	x	x	x	x	42	x
<i>Wyeomyia</i>							
<i>mitchellii</i>	x	—	—	—	—	—	—
<i>smithii</i>	—	—	x	—	—	x	x
<i>vanduzeei</i>	x	—	—	—	—	—	—
Total Species	52	50	49	50	38	48	49

1 x—Recorded by King, Bradley, and McNeel, 1942.

42—Recorded by King, Roth, Toffaleti, and Middlekauff, 1943.

42\*—Collected by J. N. Belkin.

43—New state records.

P—Species probably occurs.—King, Bradley, and McNeel, 1942.

*Aedes atlanticus* D. and K.

At the present time the females of *A. atlanticus* cannot be distinguished from those of *A. tormentor*. The following adult records are therefore based upon an examination of the male genitalia.

MISSISSIPPI—Gulfport Field: (T) 1♂<sup>2</sup> June 25; 5♂<sup>2</sup> Aug. 6; 1♂ Oct. 11. Mississippi Ordnance Plant: (L) 1, Aug. 31; 5, Sept. 7. Keesler Field: (T) 1♂<sup>2</sup> Oct. 13.

*Aedes canadensis* (Theob.)

GEORGIA—Thomasville Army Air Base: (T) 1♂, 3♀ May 5, 7; 1♀ May 12. Turner Field: (S) 1♀ March 26. Waycross Army Air Base: (S) 1♀ July 27.

*Aedes cinereus* Meig.

TENNESSEE—Municipal Airport Base Hospital: (T) 1♂<sup>2</sup> April 26-May 1; 1♂ May 3-8.

NORTH CAROLINA—Camp Sutton: (T) 1♀ July 21.

*Aedes dupreei* (Coq.)

GEORGIA—Camp Gordon: (T) 1♀ July 19. Hunter Field: (T) 1♀ July 26.

MISSISSIPPI—Columbus Army Flying School: (T) 1♂<sup>2</sup>, 1♀ June 18. Gulfport Field: (T) 1♀ Sept. 24; 2♂<sup>2</sup>, 1♀ Sept. 27-Oct. 1; 2♂ Oct. 11.

TENNESSEE—Camp Tyson: (T) 1♂<sup>2</sup> July 28.

*Aedes fulvus pallens*

ALABAMA—Sheffield (L) Aug. 30, 1942. Coll. J. N. Belkin.

*Aedes infirmatus* D. and K.

ALABAMA—Brookley Field: (S) 1♀ April 19. (L) 6, May 28; 1, Sept. 23. Napier Field: (T) 1♀ May 14.

*Aedes mitchellae* (Dyar)

MISSISSIPPI—Gulfport Field: (T) 2♀ June 18, 21; 2♀ July 7; 4♀ July 14; 21♂, 60♀ Aug. 18-27; 1♂, 7♀ Oct. 4. (L) 21, Sept. 28, Oct. 2. Keesler Field: (L) 1, July 14; 3, Sept. 14; 34, Sept. 20-22. (T) 5♀ Aug. 23-27. Laurel Army Air Base: (T) 1♂, 1♀ Aug. 18; 1♀ Oct. 22.

SOUTH CAROLINA—Charleston Army Air Base: (B) 1♂ Aug. 25; 1♀ Aug. 27. Columbia Army Air Base: (T) 1♀ Aug. 13. Myrtle Beach Bombing Range: (T) 2♀ May 12, 14; 1♂, 9♀ May 31-June 4; 2♂ June 18; 47♀ July 12-16; 1♂, 11♀ July 19-23; 13♂, 22♀ July 26-30; 4♀ Aug. 4, 50♀ Aug. 9-13; 1♂, 16♀ Aug. 16-20; 2♂, 9♀ Aug. 30-Sept. 3. (R) 5♂ Sept. 19, 24; 3♂, 6♀ Sept. 29-Oct. 1. (B) 2♀ April 30; 1♀ May 13. (L) 27, Aug. 17. Walterboro Army Air Field: (L) 1, Sept. 30. 58th FTD-AAFCFS: (T) 1♀ May 14; 1♀ June 4; 10♀ July 2; 3♀ July 12; 1♂ July 23. (S) 1♂, 4♀ June 11; 16♀ June 18. Shaw Field: (T) 2♀ July 22. Stark General Hospital: (T) 9♀ April 12, 14; 1♀ April 23; 2♀ June 2; 2♀ June 7; 1♀ Aug. 21; 4♀ Aug. 23, 25; 2♀ Oct. 4. Georgetown: (T) 2♂ Aug. 21-27.

*Aedes sticticus* (Meig.)

ALABAMA—Maxwell Field: (T) 13♂, 4♀ May 6-8; 1♀ May 10. Mobile: (S) 3♂, 2♀ April 19, 21. Tuskegee Army Air Field: (B) 1♀ May 27. (S) 6♀ May 12.

MISSISSIPPI—Columbus Army Flying School: (S) 2♀ April 7; 4♀ April 15; 10♀ April 20, 21;

<sup>1</sup> Previously unrecorded from the state.

<sup>2</sup> Identified by genitalia.

<sup>3</sup> It is quite likely that these biting records are in error since *C. apicalis* is said to feed only upon cold-blooded animals.

2♀ May 5; 7♀ May 12-21; 1♀ June 2; 1♀ June 16. (T) 2♀ April 19. (B) 9♀ April 15; 7♀ April 20, 22; 2♀ May 12; 1♀ June 10. Greenville Army Air Field: (T) 1♂, 2♀ June 9, 11; 1♀ June 14; 1♀ June 21; 1♀ June 29. (S) 5♂, 4♀ April 28-29; 1♂, 2♀ June 7; 2♀ June 18. (B) 1♀ April 29. Greenwood Army Air Field: (S) 1♀ May 22; 1♀ June 11; 1♀ June 18. Jackson Army Air Base: (S) 1♂ April 28; 2♀ June 16. Camp McCain: (B) 17♀ April 22; 8♀ April 27; 1♀ June 11; 2♀ June 12. (S) 2♀ April 13; 2♂, 16♀ April 20; 1♂, 15♀ April 25-May 1; 2♀ May 5, 6; 2♀ June 9. (T) 1♀ June 11. Mississippi Ordnance Plant: (B) 1♀ April 28; 1♀ May 25; 1♀ June 7. (S) 2♀ April 28.

*Aedes thibaulti* D. and K.

FLORIDA—Marianna Army Air Base: (T) 1♂<sup>2</sup> April 7.

SOUTH CAROLINA—Myrtle Beach Bombing Range: (B) 3♀ May 13; 8♀ May 21; 1♀ May 26; 7♀ May 30-31; 1♀ June 24.

*Aedes tormentor* D. and K.

NORTH CAROLINA—Camp Davis: (L) 1, May 26. Camp Mackall: (L) 1, June 24.

*Anopheles atropos* D. and K.

GEORGIA—Camp Stewart: (T) 1♀ May 31.

*Anopheles crucians bradleyi* King

NORTH CAROLINA—Camp Davis: (T) 1♀ May 7; 6♀ May 16-22; 1♂, 13♀ May 23-29; 2♀ May 31, June 4; 20♀ June 6-12; 1♀ July 9; 1♀ July 19; 3♀ Oct. 8; 4♀ Oct. 15. 2♀ Oct. 25 (S) 2♀ May 26-28; 1♀ Oct. 5; 1♀ Oct. 12.

*Anopheles crucians georgianus* King

FLORIDA—Camp Gordon Johnston: (L) 3, March 5; 1, April 8; 5, April 23; 2, May 17. Gainesville Airport: (L) 6, June 15; 2, June 28. Keystone Heights Airport: (L) 14, July 10.

MISSISSIPPI—Laurel Army Air Base: (L) 1, June 6.

NORTH CAROLINA—Laurinburg-Maxton Army Air Base: (L) 1, May 26; 12, June 9-12; 2, July 15; 2, Sept. 6. Seymour Johnson Field: (L) 6, April 28. Camp Mackall: (L) 3, Aug. 19; 6, Sept. 13.

ALABAMA—Napier Field: (L) 1, April 23. Tuskegee Army Air Field: (L) 2, June 23; 3, July 13; 1, July 19; 1, July 29.

SOUTH CAROLINA—Shaw Field: (L) 2, July 23. Walterboro Army Air Field: (L) 1, April 22.

*Anopheles walkeri* Theob.

NORTH CAROLINA—Camp Sutton: (T) 1♀ Aug. 9.

*Culex apicalis* Adams

MISSISSIPPI—Greenwood Army Air Field: (S) 1♀ Aug. 31; 4♀ Sept. 28, 30. (L) 2, Sept. 27. Como: (B) 1♀ Aug. 25; 1♀ Sept. 13. (T) 1♀ Aug. 17; 1♀ Aug. 26; 1♀ Aug. 31; 3♀ Sept. 13, 17; 2, 5♀ Sept. 20-24; 1♂, 4♀ Oct. 4-8. (L) 7, Oct. 5; 1, Sept. 27. (S) 1♀ Sept. 27. Gulfport Field: (S) 1♀ July 19; 2♀ Aug. 17; 1♂, 1♀ Aug. 22-28; 4♀ Sept. 11; 2♀ Sept. 29; 1♀ Oct. 13. (T) 1♂, 1♀ July 5-9; 3♂, 2♀ Aug. 16-20; 4♀ Sept. 20, 24; 2♂, 10♀ Sept. 27-Oct. 1; 2♂, 2♀ Oct. 4-8; 1♂, 2♀ Oct. 11, 15. (L) 19, July 17; 33, Aug. 22, 31; 3, Sept. 30; 1, Oct. 9; 25, Oct. 11-15. Key Field: (T) 1♀ Oct. 15. Keesler Field: (T) 1♂<sup>2</sup>, 1♀ Aug. 18, 19; 4♀ Sept. 5-11; 6♀ Sept. 22-24. (S) 1♀ July 19; 3♀ Aug. 18. (L) 2, July 13; 8, July 15; 1, Aug. 24; 25, Aug. 30.

Laurel Army Air Base: (T) 1 ♀ Oct. 5. (L) 6, May 31–June 6; 16, June 7–13; 4, June 14–20; 8, June 26; 2, Aug. 5; 9, Aug. 10; 8, Sept. 13; 3, Oct. 6; 1, Oct. 15; 2, Oct. 22. (S) 1 ♀ Oct. 6. Camp Van Dorn: (T) 4 ♂ July 5–10. (S) 1 ♀ April 6; 4 ♂, 10 ♀ May 4; 1 ♂, 1 ♀ May 18, 25; 6 ♂, 7 ♀ June 3–8; 1 ♀ June 14; 1 ♂, 3 ♀ June 21–22; 1 ♀ June 29; 4 ♀ Sept. 27; 12 ♀ Oct. 4; 1 ♀ Oct. 18. (L) 3, Feb. 3–22; 46, May 3–18; 7, June 7–21; 8, July 6–26; 4, Aug. 2; 6, Oct. 4. Clinton: (L) 2, Aug. 24; 8, Sept. 17; 44, Sept. 12; 24, Sept. 27, 28; 3, Oct. 4. (S) 3 ♀ Sept. 27, 28; 3 ♀ Oct. 4, 5; 1 ♀ Oct. 13.

*Culex nigripalpus* Theob.

The Tennessee records for this species are quite interesting, since they extend the range of this predominantly southern species quite far to the North. The larvae were carefully checked by the authors and other members of the laboratory staff.

MISSISSIPPI—Columbus Army Flying School: (S) 1 ♀ July 13. (L) 1, Oct. 1. Keesler Field: (S) 1 ♀ May 27; 1 ♀ Sept. 22. (L) 17, Sept. 16; 2, Sept. 20, 21. (T) 3 ♀ Sept. 22, 24; 1 ♂, 18 ♀ Sept. 20, 24. Mississippi Institute of Aeronautics: (S) 1 ♀ July 2. Camp Shelby: (L) 4, Sept. 10; 30, Sept. 7, 9. Gulfport Field: (L) 3, Oct. 8; 1, Oct. 15. (T) 1 ♀ Sept. 17; 3 ♂, 15 ♀ Sept. 20–24; 2 ♂, 5 ♀ Sept. 27–Oct. 1; 20 ♂, 20 ♀ Oct. 4–8; 5 ♂, 4 ♀ Oct. 11–15. (S) 1 ♂, 1 ♀ Sept. 21; 1 ♀ Sept. 29; 1 ♀ Oct. 6. Clinton: (S) 1 ♀ Sept. 17. (L) 4, Sept. 17. (B) 1 ♀ Sept. 27.

TENNESSEE—Camp Forrest: (L) 4, Aug. 9; 4, Aug. 20.

*Culex pilosus* (D. and K.)

MISSISSIPPI—Key Field: (L) 13, June 4–20. Gulfport Field: (T) 1 ♂ Sept. 27. (L) 10, Oct. 11, 13. Keesler Field: (T) 2 ♂ Oct. 11, 15.

*Culex pipiens* L.

Distributional records of *Culex pipiens* will be published separately.

*Culex salinarius* (Coq.)

This species has been collected so frequently in Mississippi and Tennessee that further distributional data from these states would be of little value.

TENNESSEE—Smyrna Army Air Field: (T) 1 ♂, 1 ♀ Aug. 23, 28; 2 ♂, 2 ♀ Sept. 27–Oct. 1. (S) 3 ♀ Sept. 23, 24. Dyersburg Army Air Base: (S) 7 ♂, 1 ♀ April 20, 21; 8 ♂, 9 ♀ May 12–24; 14 ♂, 22 ♀ June 1–26; 1 ♂, 1 ♀ June 29, July 1; 5 ♂, 4 ♀ July 11–15; 9 ♂, 5 ♀ July 19–29; 3 ♀ Sept. 23; 1 ♀ Oct. 6. (T) 2 ♂, 2 ♀ June 28, July 2. (B) 1 ♀ May 20. (L) 3, May 19; 4, June 11; 8, July 24; 14, Sept. 13; 10, Sept. 23; 7, Oct. 6, 7. Kennedy General Hospital, Memphis: (T) 1 ♀ May 3; 3 ♂, 5 ♀ Sept. 22, 24; 4 ♂, 6 ♀ Sept. 27–Oct. 1; 7 ♂, 1 ♀ Oct. 4–8. Municipal Airport Base Hospital, Memphis: (T) 2 ♀ May 21, 24; 2 ♂ June 24. (S) 2 ♀ April 26; 2 ♂, 1 ♀ May 3–8; 1 ♀ May 26; 1 ♀ June 24; 1 ♀ Oct. 12. (L) 4, June 17. Headquarters Second Army, Memphis: (T) 1 ♀ Sept. 10. Nashville Army Air Center: (S) 3 ♂, 5 ♀ May 17, 19; 5 ♀ June 18–21. (L) 11, June 4–11; 15, July 16–Aug. 2; 5, Aug. 9; 3, Oct. 11, 13.

MISSISSIPPI—Como: (T) 1 ♀ Aug. 17; 4 ♂, 8 ♀ Sept. 20–24; 4 ♂, 4 ♀ Oct. 6, 8; 10 ♂, 1 ♀ Sept. 29, Oct. 1; 10 ♀ Oct. 13. (S) 1 ♂ Sept. 21; 17 ♀ Oct. 4, 6; 5 ♂ Sept. 27; 13 ♀ Oct. 11. (R) 1 ♀ Oct. 5. (L) 1, Sept. 27. Clinton: (B) 1 ♀ Aug. 23; 2 ♀ Sept. 17; 1 ♀ Sept. 23; 13 ♀ Sept. 27, 30; 13 ♀ Oct. 5. (L) 8, Sept. 3; 21, Sept. 17; 59, Sept. 27, 28; 32, Oct. 4. (S) 1 ♀ Sept. 18; 1 ♀ Sept. 21; 4 ♂, 5 ♀, Sept. 27,

28; 1 ♂, 3 ♀ Oct. 4. Camp Van Dorn: (S) 1 ♂, 3 ♀ April 6; 1 ♂, 3 ♀ May 4–18; 1 ♂ May 24; 1 ♀ June 8; 2 ♂, 1 ♀ July 5–9; 4 ♀ Sept. 21, 27; 2 ♂, 3 ♀ Oct. 4; 1 ♂, 1 ♀ Oct. 11. (T) 1 ♂, 1 ♀ May 12, 24; 2 ♂ July 5–10; 1 ♀ Sept. 27. (L) 2, May 25; 11, June 3–29. Mississippi Ordnance Plant, Flora: (S) 1 ♀ April 28; 5 ♀ May 3–28; 1 ♀ July 5, 8; 2 ♂, 4 ♀ Aug. 2–Sept. 2; 1 ♂ Sept. 28; 1 ♂ Oct. 5; 1 ♀ Oct. 11. (T) 1 ♀ May 5. (B) 1 ♀ May 27. (L) 28, May 6–18; 10, June 25; 8 July 10; 49 Sept. 22, 23; 4 Sept. 29–30; 14, Oct. 1–6. Laurel Army Air Base: (S) 1 ♀ June 17; 1 ♀ July 4. (L) 15, May 31–June 13. (T) 1 ♂ Sept. 27; 1 ♂ Oct. 6; 1 ♂, 2 ♀ Oct. 11; 1 ♀ Oct. 18. Key Field, Meridian: (T) 1 ♂, 1 ♀ July 7, 14. (L) 4, May 21; 2, June 2. (S) 1 ♂ Oct. 10. Gulfport Field: (S) 1 ♂ May 26; 2 ♂, 23 ♀ June 1–21; 9 ♂, 24 ♀ July 5–19; 7 ♀ Aug. 5–28; 2 ♂ Sept. 11; 1 ♂ Sept. 21; 1 ♀ Sept. 29; 1 ♂, 6 ♀ Oct. 4; 2 ♀ Oct. 13. (T) 18 ♂, 23 ♀ June 14–18; 43 ♂, 16 ♀ June 7–25; 22 ♂, 8 ♀ June 28–July 1; 91 ♂, 147 ♀ July 5–25; 77 ♂, 43 ♀ Aug. 2–27; 1 ♀ Sept. 10; 1 ♂, 27 ♀ Sept. 20–24; 14 ♂, 36 ♀ Sept. 27–Oct. 1; 21 ♂, 54 ♀ Oct. 4–8; 2 ♂, 9 ♀ Oct. 11–15. (L) 31, May 28; 4, June 24; 10, July 1, 8; 1, Aug. 22; 1, Oct. 9. (B) 2 ♀ June 10.

*Culex tarsalis* (Coq.)

The occurrence of this species this year over such a wide territory and in such numbers is quite surprising. Our collections during 1942 over this same territory and from many of the same posts produced only two larvae and two adults from Camp Tyson, Henry County, Tennessee.

TENNESSEE—Smyrna Army Air Field: (T) 1 ♀ Aug. 24; 6 ♀ Sept. 20–24; 1 ♂, 1 ♀ Sept. 29, Oct. 1. (S) 1 ♀ Sept. 23. Municipal Airport Base Hospital, Memphis: (T) 1 ♀ Sept. 24. (S) 1 ♀ Oct. 7. Dyersburg Army Air Base: (S) 1 ♀ Sept. 16. Headquarters Second Army, Memphis: (T) 1 ♀ Sept. 13. Nashville Army Air Center: (S) 1 ♂ Oct. 4.

ALABAMA—Fort McClellan: (T) 1 ♀ Sept. 7. Camp Sibert: (T) 5 ♀ Sept. 20–24.

GEORGIA—Camp Wheeler: (T) 1 ♀ Sept. 20; 1 ♀ Sept. 24.

FLORIDA—Marianna Army Air Base: (T) 1 ♀ Sept. 27.

MISSISSIPPI—Mississippi Ordnance Plant, Flora: (S) 1 ♀ Sept. 13; 1 ♀ Sept. 20. Camp Van Dorn: (T) 1 ♀ Sept. 27. Greenwood Army Air Field: (T) 1 ♀ Sept. 13; 1 ♀ Sept. 20. Gulfport Field: (T) 3 ♀ Sept. 20, 24. Como: (T) 16 ♀ Sept. 13–17; 5 ♀ Sept. 20, 24; 1 ♂, 1 ♀ Oct. 6. (S) 1 ♀ Sept. 27. Camp McCain: (T) 1 ♀ Sept. 13; 1 ♀ Sept. 27. Clinton: (S) 1 ♀ Sept. 21. Camp Shelby: (T) 1 ♀ Sept. 24; 2 ♀ Sept. 27; 1 ♀ Oct. 7. (L) 1, Oct. 9. Greenville Army Air Field: (S) 1 ♀ Oct. 16. Keesler Field: (T) 1 ♀ Sept. 24. Laurel Army Air Base: (S) 1 ♀ Oct. 22.

*Culiseta inornata* (Will.)

TENNESSEE—Dyersburg Army Air Base: (L) 23, April 21; 19, April 27; 2, Oct. 6. (S) 3 ♀ March 23–24. Nashville Army Air Center: (S) 1 ♂, 2 ♀ May 17. Headquarters Second Army, Memphis: (S) 9 ♀ April 24, 30. (T) 4 ♀ April 21, 23. (L) 31, March 24.

GEORGIA—Moody Field: (L) 2, Feb. 20; 2, March 11. Camp Wheeler: (T) 1 ♂ March 19; 1 ♂ April 5; 1 ♂, 1 ♀ April 16.

*Culiseta melanura* (Coq.)

TENNESSEE—Municipal Airport Base Hospital, Memphis: (T) 1 ♀ June 8; 1 ♂, 1 ♀ Sept. 8.

Smyrna Army Air Force Primary School: (S) 1 ♀ July 29. Dyersburg Army Air Base: (S) 1 ♂ Oct. 6.

MISSISSIPPI—Gulfport Field: (S) 1 ♂, 1 ♀ Aug. 5. (T) 2 ♀ Oct. 15. Mississippi Ordnance Plant, Flora: (S) 1 ♀ Sept. 13. Clinton: (S) 1 ♀ Oct. 4. Keesler Field: (S) 1 ♀ June 8; 1 ♀ June 30; 2 ♂, 7 ♀ Aug. 18. Key Field: (S) 1 ♀ Aug. 7. Camp Van Dorn: (S) 1 ♀ June 22; 1 ♀ Aug. 2.

*Mansonia perturbans* (Walk.)

MISSISSIPPI—Columbus Army Flying School: (B) 1 ♀ June 13; 2 ♀ July 21, 22. Gulfport Field: (T) 1 ♀ July 7. (B) 2 ♀ May 15, 19. Mississippi Institute of Aeronautics: (T) 1 ♀ June 9. Camp Van Dorn: (T) 1 ♀ May 12. (S) 2 ♀ May 11; 1 ♀ May 25; 1 ♀ June 2; 1 ♂, 1 ♀ June 8; 1 ♀ June 16; 1 ♀ Aug. 2.

*Mansonia titillans* (Walk.)

This tropical species has previously been recorded in the United States only from central and southern Florida and has been found breeding only on water lettuce (*Pistia stratiotes*). This new record is therefore quite interesting.

ALABAMA—Grand Vieu Park: (S) 1 ♀ Sept. 9.

*Orthopodomyia alba* Baker

An overlooked 1942 record from Maxwell Field is included here, because of the rarity of this species. The larva from Camp Shelby was sent to Doctor Alan Stone of the United States National Museum, who compared it with type material.

ALABAMA—Maxwell Field: (S) 1 ♀ May 27, 1942.

MISSISSIPPI—Camp Shelby: (L) 1, Aug. 10.

NORTH CAROLINA—Ft. Bragg: (L) 1, Oct. 29.

*Psorophora cyanescens* (Coq.)

GEORGIA—Spence Field: (L) 1, May 13. Turner Field: (S) 1 ♀ Aug. 27. Fort Benning: (S) 3 ♀ July 10–26; 1 ♀ Sept. 30. (T) 2 ♀ July 9, 26. (L) 1, June 3. Cochran Field: (B) 1 ♀ June 3; 1 ♀ July 23; 8 ♀ Aug. 2–23. (S) 1 ♀ June 2; 3 ♀ Aug. 4. (T) 6 ♀ Aug. 11–27. Fort Oglethorpe: (S) 3 ♀ Aug. 6.

TENNESSEE—Smyrna Army Air Field: (T) 19 ♂, 29 ♀ Aug. 22–28; 13 ♂, 4 ♀ Sept. 13–17; 1 ♀ Sept. 22; 2 ♀ Sept. 29. (S) 1 ♀ Aug. 28; 2 ♀ Sept. 15. Camp Tyson: (T) 1 ♂ July 28. (B) 2 ♀ Aug. 5. Headquarters Second Army, Memphis: (S) 1 ♂, 3 ♀ Sept. 16. Camp Forrest: (L) 2, Sept. 7. Kennedy General Hospital, Memphis: (T) 3 ♂<sup>2</sup> Sept. 29, Oct. 1.

SOUTH CAROLINA—Fort Jackson: (T) 3 ♀ July 15. (B) 1 ♀ July 7.

*Psorophora horrida* (D. and K.)

As common as the adults of this species appear to be in certain localities, it is amazing that larvae are so seldom encountered. The reared specimens from Fort Benning would have been of much more value if they had been retained as larvae.

GEORGIA—Battley General Hospital, Rome: (B) 5 ♀ Aug. 17, 19; 1 ♀ Aug. 30. Fort Benning: (R) 4 ♀ July 1. (S) 4 ♀ June 22; 4 ♀ July 3–10. Fort Oglethorpe: (S) 2 ♀ Aug. 6.

ALABAMA—Maxwell Field: (T) 3 ♂ May 6, 8. (B) 5 ♀ May 7. Tuskegee Army Air Field: (S) 2 ♀ May 12; 3 ♀ May 31. (B) 8 ♀ May 27; 16 ♀ June 17; 5 ♀ July 14, 22; 3 ♀ Aug. 3.

SOUTH CAROLINA—Fort Jackson: (B) 3 ♀ July 19, 30. Shaw Field: (B) 1 ♀ July 19. Myrtle Beach Bombing Range: (T) 1 ♂ Aug. 16.

NORTH CAROLINA—Laurinburg-Maxton Army Air Base: (S) 4 ♀ July 19–27. Camp Mackall: (B) 1 ♀ July 27; 1 ♀ Aug. 24. (S) 1 ♀ July 30. Seymour Johnson Field: (S) 5 ♀ July 12, 30. (B) 3 ♀ July 7.

*Psorophora howardii* (Coq.)

ALABAMA—Brookley Field: (B) 1 ♀ June 22. (L) 1, Sept. 23. Fort McClellan: (L) 4, May 31. Opelika: (L) 2, Sept. 24.

*Psorophora varipes* (Coq.)

SOUTH CAROLINA—Fort Jackson: (B) 1 ♀ July 19. 58th FTD, AAFCS (Primary), Orangeburg: (S) 1 ♀ July 30.

NORTH CAROLINA—Laurinburg-Maxton Army Air Base: (S) 3 ♀ July 19, 24; 1 ♀ July 27. Seymour Johnson Field: (S) 10 ♀ July 23; 5 ♀ July 30; 2 ♀ Aug. 7. (B) 2 ♀ July 7.

*Uranotaenia lowii* (Theob.)

Larval specimens must be mature or else they will be indistinguishable from *U. sapphirina*.

ALABAMA—Camp Sibert: (T) 1 ♀ Aug. 30.

GEORGIA—Cochran Field, Macon: (T) 1 ♀ Sept. 3; 3 ♀ Sept. 8, 10; 1 ♂ Sept. 15. Thomasville Army Air Base: (T) 1 ♀ July 7.

MISSISSIPPI—Gulfport Field: (S) 1 ♀ Aug. 15. (T) 6 ♀ June 7–28; 1 ♂, 104 ♀ July 5–25; 401 ♀ Aug. 2–27; 5 ♀ Sept. 10; 1 ♂, 72 ♀ Sept. 13–17; 53 ♀ Sept. 20–24; 29 ♀ Sept. 27–Oct. 2; 11 ♀ Oct. 4; 3 ♀ Oct. 13, 15. Keesler Field: (T) 35 ♀ Aug. 18–27; 322 ♀ Aug. 29–Sept. 4; 468 ♀ Sept. 5–11; 13 ♀ Sept. 14–17; 74 ♀ Sept. 20–24; 2 ♀ Oct. 11. Camp Van Dorn: (T) 2 ♀ Aug. 23, 30; 1 ♀ Sept. 20. Laurel Army Air Base: (T) 1 ♀ Sept. 20. Clinton: (L) 1, Sept. 27.

NORTH CAROLINA—Camp Mackall: (L) 1, June 25.

*Uranotaenia sapphirina* (O. S.)

NORTH CAROLINA—Laurinburg-Maxton Army Air Base: (T) 1 ♀ June 7; 1 ♀ July 2; 1 ♀ Aug. 2; 1 ♀ Sept. 6. Camp Mackall: (T) 1 ♂, 4 ♀ May 10–June 4; 1 ♂, 7 ♀ June 7–30; 1 ♀ July 14; 2 ♀ Aug. 9; 2 ♀ Sept. 21, 22. (L) 3, July 5; 2, Aug. 9; 4, Oct. 13. Camp Butner: (T) 2 ♀ June 2, 4; 2 ♀ Sept. 18. (S) 2 ♀ Sept. 27; 1 ♀ Oct. 4. Seymour Johnson Field, Goldsboro: (T) 1 ♀ Aug. 18. Moore General Hospital, Swannanoa: (L) 1, Sept. 30. Camp Davis: (T) 1 ♂, 1 ♀ Oct. 6, 8. (L) 1, Oct. 5.—11-17-43.

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